

Claims

WHAT IS CLAIMED IS:

- 1 1. A method for securely accelerating an external domain locally, comprising:
 - 2 receiving a secure communications request for an external domain from a
 - 3 client;
 - 4 identifying a domain identification associated with the request; and
 - 5 routing the request to a local domain accelerator based on the domain
 - 6 identification, wherein the local domain accelerator communicates securely with the
 - 7 external domain and securely with the client, and wherein the local domain
 - 8 accelerator caches data from the external domain for servicing the request of the
 - 9 client.
- 1 2. The method of claim 1 further comprising processing the method as at least
- 2 one of a forward proxy and a transparent proxy.
- 1 3. The method of claim 1 further comprising, returning, by the local domain
- 2 accelerator, to the client a domain certificate that identifies the local domain
- 3 accelerator as the external domain to the client.
- 1 4. The method of claim 1 further comprising, establishing a Secure Sockets
- 2 Layer (SSL) handshake between the client and the local domain accelerator to
- 3 service the request, wherein the client believes that the handshake is with the
- 4 external domain.
- 1 5. The method of claim 1 wherein receiving further includes intercepting the
- 2 request that originates from the client for the external domain.
- 1 6. The method of claim 1 further comprising, accessing, by the local domain
- 2 accelerator, caching services for caching and managing the data.

1 7. The method of claim 1 wherein identifying further includes stripping a host
2 header from the request, wherein the host header is the domain identifier which
3 identifies the external domain.

1 8. A method for securely accelerating an external domain locally, comprising:
2 receiving a secure request forwarded from a proxy, the secure request
3 originating from a client and destined for an external domain;
4 establishing a secure communication with the client by providing the client a
5 certificate associated with the external domain; and
6 servicing the client with data from local cache that is acquired from the
7 external domain, and wherein a portion of that data is used to service the secure
8 request.

1 9. The method of claim 8 wherein servicing further includes acting as the
2 external domain when interacting with the client.

1 10. The method of claim 8 further comprising accessing caching services from
2 the proxy to manage the data in the local cache.

1 11. The method of claim 8 wherein servicing further includes acquiring at least a
2 portion of the data from the external domain in advance of a subsequent request for
3 that portion of the data, wherein the subsequent request is issued from the client.

1 12. The method of claim 8 wherein servicing further includes interacting
2 securely with the external domain to acquire the data housed in the local cache.

1 13. The method of claim 12 wherein interacting securely further includes
2 mutually signing interactions transmitted between the method and the external
3 domain.

1 14. The method of claim 13 wherein interacting securely further includes using
2 the proxy to establish a secure communications channel between the method and the
3 external domain.

1 15. An external domain acceleration system, comprising:
2 a proxy;
3 a local domain accelerator, wherein a client securely requests an external
4 domain and the proxy routes the request to the local domain accelerator, the local
5 domain accelerator securely communicates with the external domain and caches
6 data in a local cache of the proxy which is used to service the client via secure
7 communications between the local domain accelerator and the client.

1 16. The external domain acceleration system of claim 15 wherein the local
2 domain accelerator vends a certificate associated with the external domain to the
3 client to present itself as the external domain.

1 17. The external domain acceleration system of claim 15 wherein
2 communications between the local domain accelerator and the external domain are
3 mutually signed.

1 18. The external domain acceleration system of claim 15 wherein the client is a
2 browser application that interacts with the local domain accelerator via Secure
3 Sockets Layer (SSL) communications.

1 19. The external domain acceleration system of claim 15 wherein the proxy is at
2 least one of a transparent proxy and a forward proxy.

1 20. The external domain acceleration system of claim 15 wherein the proxy
2 creates a secure communications tunnel between the client and the local domain
3 accelerator and the proxy creates a secure communications channel between the
4 local domain accelerator and the external domain.

1 21. An external domain acceleration system, comprising:
2 a local domain accelerator; and
3 cache, wherein the local domain accelerator securely communicates with a
4 client as if the local domain accelerator was an external domain and securely
5 communicates with the external domain for purposes of acquiring data from the
6 external domain, and wherein the local domain accelerator houses the data in and
7 vends the data from the cache to the client.

1 22. The external domain acceleration system of claim 21 further comprising a
2 proxy that acts as a secure conduit between the client and the local domain
3 accelerator and a secure conduit between the local domain accelerator and the
4 external domain.

1 23. The external domain acceleration system of claim 21 wherein the local
2 domain accelerator vends a certificate associated with the external domain to the
3 client to present itself as the external domain.

1 24. The external domain acceleration system of claim 23 wherein the local
2 domain accelerator and the external domain exchange certificates with one another
3 during communications with one another.

1 25. The external domain acceleration system of claim 21 wherein the client is a
2 browser and uses Secure Sockets Layer (SSL) communications to attempt to
3 directly communicate with the external domain, the communications are intercepted
4 and forwarded to a proxy and the proxy forwards the communications to the local
5 domain accelerator where the local domain accelerator presents itself securely to the
6 client as if it were the external domain.

1 26. The external domain acceleration system of claim 21 wherein the external
2 domain includes a plurality of external sites having a plurality of services.